

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,794 10/11/2005		10/11/2005	Klas Olofsson	P/1228-202 4510	
2352	7590	10/31/2006		EXAM	INER
OSTROLE	NK FAB	ER GERB & SOFF	NGUYEN, TU MINH		
		HE AMERICAS	ART UNIT	PAPER NUMBER	
NEW YORK, NY 100368403				3748	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/552,794	OLOFSSON, KLAS				
Office Action Summary	Examiner	Art Unit				
	Tu M. Nguyen	3748				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
Responsive to communication(s) filed on 12 October 2006. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 1,3,4,6,8 and 9 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,3,4,6,8 and 9 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 11 October 2005 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) ⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ⊠ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

DETAILED ACTION

1. An Applicant's Amendment filed on October 12, 2006 has been entered. Claims 2, 5, 7, 10, and 11 have been canceled; and claims 1, 3, 4, 6, 8, and 9 have been amended. Overall, claims 1, 3, 4, 6, 8, and 9 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 4, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al. (U.S. Patent 4,916,897).

Re claims 1 and 6, as shown in Figures 4 and 24-26, Hayashi et al. disclose an apparatus for containing a particle filter (74) for an exhaust system of a combustion engine (diesel engine) and a method for regenerating said particle filter, the apparatus comprising:

- the filter (74) adapted to being regenerated by spontaneous combustion of particles accumulated in the filter;
 - a silencer (10) which encloses the filter;
- a bypass duct (33) via which exhaust gases from the combustion engine in operation are arranged to be led to bypass past the filter (74) when the counter pressure in the exhaust gases which is caused by the filter exceeds a set level (step 102 with YES answer and step 104), and

Art Unit: 3748

the duct (33) leading the exhaust gases past the filter through a space (24) inside the silencer which encloses the filter;

Page 3

- a valve (41) which is operable to open (step 104) when the counter pressure in the exhaust gases is above the set level (step 102 with YES answer), for leading exhaust gases from the combustion engine past the filter; and
- a catalyst (201) and a device (41) operable for causing the exhaust gases to pass through the catalyst during bypassing of the filter.

Re claims 4 and 9, the apparatus and method of Hayashi et al. further comprise at least one pressure sensor (78) for detecting the counter pressure, the sensor produces output signals which are operable for controlling the bypassing of the filter.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. as applied to claims 1 and 6, respectively, above, in view of Takahashi et al. (U.S. Patent 6,918,463).

Application/Control Number: 10/552,794

Art Unit: 3748

The apparatus and method of Hayashi et al. disclose the invention as cited above, however, fail to disclose that the valve is operable to open because of the action of the pressure of the exhaust gases against a holding-back spring.

As shown in Figure 5, Takahashi et al. also disclose a muffler for an engine, comprising a filter (6), a silencer (2) that encloses the filter, a bypass duct (7) that allows an exhaust gas stream to bypass the filter, and a valve (9) to selectively lead the exhaust gas stream to the bypass duct or to the filter. As indicated on lines 34-49 of column 3, Takahashi et al. teach that it is conventional in the art to utilize a holding-back spring in the valve so that the valve is operable to open because of the action of the pressure of the exhaust gases against the holding-back spring. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the teaching by Takahashi et al. in the apparatus and method of Hayashi et al., since the use thereof would have been routinely practiced by those with ordinary skill in the art.

Response to Arguments

6. Applicant's arguments with respect to the references applied in the previous Office Action have been fully considered but they are not persuasive.

In response to applicant's argument that Hayashi et al. fail to disclose or suggest a space inside the silencer which encloses the filter; wherein the duct leads exhaust gases past the filter through said space (page 5 of the Applicant's Amendment), the examiner respectfully disagrees.

The sentence "a space inside the silencer which encloses the filter" does not clearly indicate which element (a space or the silencer) is enclosing the filter. This is especially true

Art Unit: 3748

when Applicant does not have "a space which encloses the filter" in the pending application. As can be seen in Figure 2, the space alleged to enclose the filter (3) in the pending application only surrounds a circumferential region of the filter and does not cover the two ends of the filter. Furthermore, Applicant has clearly defined that "a silencer which encloses the filter" (see line 5 of claim 6). Thus, in a broad reasonable interpretation of the claim language, Hayashi et al. clearly disclose the claim limitation in dispute. Claims in a pending application are given their broadest reasonable interpretation. See *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 6

Communication

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMN

October 27, 2006

Tu M. Nguyen

Primary Examiner

Tu M. Nguyen

Art Unit 3748